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(71) Applicant (*for all designated States except US*): **GIBBS TECHNOLOGIES LTD** [GB/GB]; Avenue Road, Nuneaton, Warwickshire CV11 4LY (GB).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **GIBBS, Alan, Timothy** [NZ/GB]; 28 Albert Bridge House, 127 Albert Bridge Road, London SW11 4PL (GB).

(74) Agents: **CHURCH, Simon, J.** et al.; Marks & Clerk, 144 New Walk, Leicester LE1 7JA (GB).

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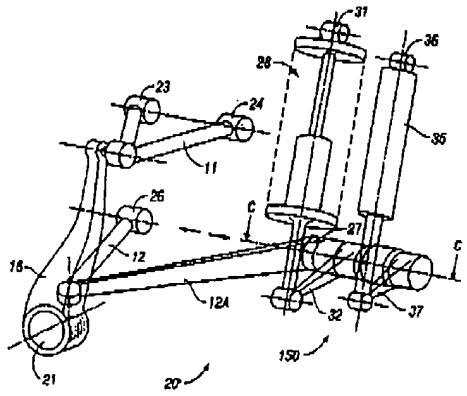
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(54) Title: AMPHIBIOUS VEHICLE



(57) Abstract: An amphibious vehicle (1, fig 1) wheel suspension (20') comprises upper and lower linkages (11, 12); road suspension means (28); and a retraction means (35) for moving the wheel between a protracted position for road use, and a retracted position for marine use. Suspension means (28) can be operatively disconnected from the wheel and/or the linkages to allow for retraction and protraction. Retraction means (35) may also be disconnected for road use. The disconnection mechanisms may comprise a ball and track mechanism (34', fig. 3), interlocking splines (92A, 93A, 96, figs. 4 and 4A), interlocking teeth (106, 108, fig. 5), or a pneumatic clutch (138, fig. 6). Fig. 8 shows a combination of splines (160 and 161) for suspension lever arm (32), and pneumatic clutch (168) for retraction arm (37). Suspension means (28) may be connected to upper linkage (11) (fig. 2). Coil, torsion bar, or hydropneumatic springs may be used.

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